

976-20 PCT US seq list with priority claims
SEQUENCE LISTING

<110> Center for Genetic Engineering and Biotechnology

<120> ANTIBODY FRAGMENTS SPECIFIC FOR HUMAN CARCINOEMBRYONIC ANTIGEN (CEA)

<130> 976-20 PCT/US

<140> Unassigned

<141> 2004-10-19

<150> PCT/CU2003/000005

<151> 2003-04-28

<150> CU2002/0086

<151> 2002-04-09

<160> 21

<170> PatentIn Ver. 2.1

<210> 1

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: oligo

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ggggatatcc accatgract tcggggtgag ctkggtttt

39

<210> 2

<211> 29

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

<400> 2

ayctccacac acaggrccag tggatagac

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

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40

<210> 4

<211> 21

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

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<211> 14

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: linker I

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Glu Gly Lys Ser Ser Gly Ser Gly Ser Glu Ser Lys Val Asp
1 5 10

<210> 6

<211> 5

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: linker II

<400> 6

Gly Gly Gly Gly Ser
1 5

<210> 7

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

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ggt 63

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<211> 62

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: oligo

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gagggttaat cccaggatc aggctccgaa tccaaagtgc acgacattgt gatgaccag 60
tc 62

<210> 10
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligo

<400> 10
aaggaaaaaa gcggccgctt tcagctccag cttggtt 37

<210> 11
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligo

<400> 11
agagccgccc ccacctgagg agactgtgag agtggt 36

<210> 12
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<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

<400> 12
ggtggcggcg gctctgacat tgtgatgacc cagtct 36

<210> 13
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<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: vector

<400> 13
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atctcagaag agatctgaa ttcccatcat catcaccatc actaataa 108

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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligo

<400> 14

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<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

<400> 15
ctcttctgag atgagttttt gttc

24

<210> 16
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<213> Artificial Sequence

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<223> Description of Artificial Sequence: scFv

<400> 16
Glu Val Lys Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
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20 25 30

Ala Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val
35 40 45

Ala Phe Ile Ser Ser Asp Gly Ile Ala Tyr Tyr Ala Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ile Leu Tyr Leu
65 70 75 80

Gln Met Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95

Arg Val Tyr Tyr Gly Ser Ser Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Leu Thr Val Ser Ser Glu Gly Lys Ser Ser Gly Ser Gly Ser
115 120 125

Glu Ser Lys Val Asp Asp Ile Val Met Thr Gln Ser Pro Lys Phe Met
130 135 140

Ser Thr Ser Val Gly Asp Arg Val Ser Val Thr Cys Lys Ala Ser Gln
145 150 155 160

Asn Ala Gly Thr Asn Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser
165 170 175

Pro Lys Ala Leu Ile Tyr Ser Ala Ser Ser Arg Asn Ser Gly Val Pro
180 185 190

Asp Arg Ile Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195 200 205

Ser Asn Val Gln Ser Glu Asp Leu Ala Glu Tyr Phe Cys Gln Gln Tyr

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210 215 220

Asn Ser Tyr Pro Leu Val Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
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Lys

<210> 17

<211> 232

<212> PRT

<213> Artificial sequence

<220>

<223> Description of Artificial Sequence: diobody

<400> 17

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Ser Leu Lys Phe Ser Cys Ala Ala Ser Gly Phe Pro Phe Asn Arg Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val
35 40 45

Ala Phe Ile Ser Ser Asp Gly Ile Ala Tyr Tyr Ala Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ile Leu Tyr Leu
65 70 75 80

Gln Met Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95

Arg Val Tyr Tyr Tyr Gly Ser Ser Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Leu Thr Val Ser Ser Gly Gly Gly Ser Asp Ile Val Met
115 120 125

Thr Gln Ser Pro Lys Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser
130 135 140

Val Thr Cys Lys Ala Ser Gln Asn Ala Gly Thr Asn Val Ala Trp Tyr
145 150 155 160

Gln Gln Lys Pro Gly Gln Ser Pro Lys Ala Leu Ile Tyr Ser Ala Ser
165 170 175

Ser Arg Asn Ser Gly Val Pro Asp Arg Ile Thr Gly Ser Gly Ser Gly
180 185 190

Thr Asp Phe Thr Leu Thr Ile Ser Asn Val Gln Ser Glu Asp Leu Ala
195 200 205

Glu Tyr Phe Cys Gln Gln Tyr Asn Ser Tyr Pro Leu Val Thr Phe Gly
210 215 220

Ala Gly Thr Lys Leu Glu Leu Lys
225 230

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<210> 18

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: oligo

<400> 18

catgccatgg ggaatccgaa gtgaagctgg tggag

35

<210> 19

<211> 36

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

<400> 19

catgccatgg atcccggtt gatgggtatg gtgatg

36

<210> 20

<211> 21

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: diobody MS

<400> 20

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21

<210> 21

<211> 255

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: diobody MS

<400> 21

Glu Val Lys Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
1 5 10 15

Ser Leu Lys Phe Ser Cys Ala Ala Ser Gly Phe Pro Phe Asn Arg Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val
35 40 45

Ala Phe Ile Ser Ser Asp Gly Ile Ala Tyr Tyr Ala Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ile Leu Tyr Leu
65 70 75 80

Gln Met Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95

Arg Val Tyr Tyr Tyr Gly Ser Ser Tyr Phe Asp Tyr Trp Gly Gln Gly

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100 105 110

Thr Thr Leu Thr Val Ser Ser Gly Gly Gly Ser Asp Ile Ile Met
115 120 125

Thr Gln Ser Pro Lys Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser
130 135 140

Val Thr Cys Lys Ala Ser Gln Asn Ala Gly Thr Asn Val Ala Trp Tyr
145 150 155 160

Gln Gln Lys Pro Gly Gln Ser Pro Lys Ala Leu Ile Tyr Ser Ala Ser
165 170 175

Ser Arg Asn Ser Gly Val Pro Asp Arg Ile Thr Gly Ser Gly Ser Gly
180 185 190

Thr Asp Phe Thr Leu Thr Ile Ser Asn Val Gln Ser Glu Asp Leu Ala
195 200 205

Glu Tyr Phe Cys Gln Gln Tyr Asn Ser Tyr Pro Leu Val Thr Phe Gly
210 215 220

Ala Gly Thr Lys Leu Glu Leu Lys Ala Ala Ala Gly Ser Glu Gln Lys
225 230 235 240

Leu Ile Ser Glu Glu Asp Leu Asn Ser His His His His His His
245 250 255